

A Survey of Beer Throughout the Middle Ages in Britain

Master Geoffrey deWygan, OL

The Domesday Book of 1066

"The monks of St. Paul's Cathedral brewed 67,814 gallons of ale using 175 quarters of barley, 175 quarters of wheat, and 708 quarters of oats."

This would probably have been a thick, and sweet ale from the first runnings, and used no hops or herbs.

The Domesday Book of St. Paul's of the year M.CC.XX.II by William Hale Hale [sic]

Bennett, Judith *Ale, Beer, and Brewsters in England* (1996) ISBN 0195126505

In 1282, when Robert Sibille the younger was presented at the court of Kiworth Harcourt for selling his ale at too high a price, the stipulated price left him little room for profit. Having paid 2s. for 4 bushels of malt and required to sell 5 gallons of ale for 2., he would have had to draw 60 gallons from his malt just to recoup his investment. His ale, in other words, would have been very weak indeed and his profits very low.

Curye on Inglysch, a middle English textbook, 14th C. Oxford University Press ISBN 0-19-722409-1

"Ad faciendum brakott. Take xiii galouns of good fyn ale {th}at {th}e grout {th}ereof be twies meischid, & put it into a stonenn vessle. & lete it stonde iii daies of iiiii, til it be stale. Afterward ake a quart of fyn wort, halfa quart of lyf hony; & sette it ouer {th}e fier, & lete it se{th}e, & skyme it wel til it be cleer. & {th}ut {th}erto a pennywor{th} of poudir of peper & I pennywor{th} of poudir of clowis, & s{th}e hem wel togidere til it boyle. Take it doun & lete it kele, & poure {th}e clere {th}ereof into the foreseid vessel, & {th}e groundis {th}ereof put it into a bagge, into {th}e foreseid pot, & stoppe it wel wi{th} a lynnenn cloo{th} {th}at noon eir will come out; & put {th}ereto new berm, stoppe it iii dayes or iiiii eer {th}ou drinke {th}ereof. Put aqua ardente it among."

Arnold, Richard *Customs of London* 1503

(recipe for "Francis Drake beer")

"To brewe beer x. quarters malte. Ij. quarters ij. Quarters oots/ xl. Ll weight of hoopys.// To make lx barrell[es] of sengyll beer."

Note the use of hops in this sketchy recipe, along with malted barley and malted oats. To brew beer: ten quarters of malt [barley], two quarters of [malted] oats, and 40 pounds of hops for 60 barrels of single beer.

Harrison, William *The Description of England* 1577 Dover Publications ISBN 0-486-28275-9

"Having therefore ground eight bushels of good malt upon our quern, where the toll is saved, she addeth unto it half bushel of wheat meal, and so much of oats small ground, and so tempereth of mixeth them with the malt that you cannot easily discern the one from the other; otherwise these latter would clunter, fall into lumps, and thereby become unprofitable. The first liquor (which is full eighty gallons, according to the proportion of our furnace) she maketh boiling hot, and then poureth it softly into the malt, where it resteth (but without stirring) until her second liquor be almost ready to boil. This done, she letteth her mash run till the malt be left without liquor, or at the leastwise the greatest part of the moisture, which she perceiveth by the stay and soft issue thereof; and by this time her second liquor in the furnace is ready to seethe, which is put also to the malt, as the first woort also again into the furnace, whereunto she addeth two pounds of the best English hops, and so letteth them seethe together by the space of two hours in summer or an hour and a half in winter, whereby it getteth an excellent colour, and continuance without impeachment or any superfluous tartness. But, before she putteth her first woort into the furnace, or mingleth it with the hops, she taketh out a vessel full, of eight or nine gallons, which she shutteth up close, and suffereth no air to come into it till it become yellow, and this she reserveth by itself unto further use, as shall appear hereafter, calling it brack woort or charwoort, and as she saith, it addeth also to the color of the drink, whereby it yieldeth not unto amber or fine gold in hue unto the eye. By this time also her second woort is let run; and, the first being taken out of the furnace, and placed to cool, she returneth the middle woort unto the furnace, where it is stricken over, or from whence it is taken again, when it beginneth to boil, and mashed the second time, whilst the third liquor is heating (for there are three liquors), and this last put into the furnace, when the second is mashed again. When she hath mashed also the last liquor (and set the second to cool by the first), she letteth it run, and then seethe it again with a pound and a half of new hops, or peradventure two pounds, as she seeth cause by the goodness or baseness of the hops, and, when it hath sodden, in summer two hours, and in winter an hour and a half, she striketh it also, and reserveth it unto mixture with the rest when time doth serve therefore. Finally, when she setteth her drink together, she addeth to her brackwoort or charwoort half an ounce of arras, and half a quarter of an ounce of bayberries, finely powdered, and then, putting the same into her woort, with a handful of wheat flour, she proceedeth in such usual order as common brewing requireth. Some, instead of arras and bays, add so much long pepper only, but in her opinion and my liking, it is not so good as the first, and hereof we make three hogsheads of good beer, such (I mean) as is meet for poor men as I am to live withal, whose small maintenance (for what great thing is forty pounds a year, computatis computandis, able to perform?) may endure no deeper cut, the charges whereof groweth in this manner. I value my mal at ten shillings, my wood at four shillings (which I buy), my hops at twenty pence, the spice at twopence, servants' wages two shillings sixpence, with meat and drink, and the wearing of my vessel at twenty pence, so that for my twenty shillings I have ten score gallons of beer or more, notwithstanding the loss in seething, which some, being loth to forego, do not observe the time, and therefore speed thereafter in their success, and worthily. The continuance of the drink is always determined after the quality of the hops, so that being well hopt it lasteth longer. For it feedeth upon the hop, and holdeth out so long as the force of the same continueth, which being extinguished, the drink must be spent, or else it dieth and becometh of no value."

Markham, Gervase *The English Housewife* 1631 McGill-Queens Press ISBN 0-7735-1103-2

Of brewing ordinary beer

"Touching ordinary beer, which is that wherewith either nobleman, gentleman, yeoman of husbandman shall maintain his family the whole year; it is meet first that our English housewife respect the proportion or allowance of malt due to the same, which amongst the best husbands is thought most convenient, and it is held that to draw from one quarter of good malt three hogsheads is the best ordinary proportion that can be allowed, and having age and good cask to lie in, it will be strong enough for any goodman's drinking." "...and then to every quarter of malt put a pound and a half of the best hops you can get, and boil them an hour together."

Of small beer

"Now for your second or small drink which are left upon the grains...put it into the lead with the former hops and boil the other also...and put it also to the barm and so tun it up also into smaller vessels, and of this second beer you shall not draw above one hogshead to three of the better."

A quarter in the early 16th Century often was (and is) a unit of volume equal to eight bushels. A bushel in the 16th Century was equal to 8 "gallons". However, these were gallons of wheat, which might not correspond to the liquid "gallon" used for beer or wine. Fortunately, an English Royal Standard Bushel measure from AD 1496 has survived to the present day. Measurements in the 20th Century showed that this bushel holds 2144.8 cubic inches, in slight contrast to the US bushel of 2150.42 cubic inches.

Zupko, R.E. *A dictionary of English Weights and Measures* 1968

The hogshead is a variable measure in the range of 60 to 80 gallons, Bibliography, modern:

The Markham would be for about 200 gallons. GD

Bibliography, historical

The Historical Companion To House -Brewing

Clive LaPensée

Montag Publications

A Sip Through Time

Cindy Renfrow

Self published

The English Housewife

Gervase Markham

McGill Queen's University Press

The Description of England

William Harrison

Dover Publications, New York

The Closet of the Eminently Learned Sir Kenelme Digie Opened

Published in London, 1669

Making Beer (my favorite introduction to brewing)

William Mares

Knopf, New York

The Complete Joy of Home Brewing

Charlie Papazian

Avon Books, New York

Pale Ale (Classic Beer Style Series)

Terry Foster

Brewers Publications, Boulder, CO

Additional:

Most anything written by beer authority Michael Jackson will be informative on the world's many beer styles. Even though it is from the modern perspective, he speaks well about what makes up individual styles.

Web:

SCA, Society site <http://www.sca.org>

SCA, regional site <http://www.eastkingdom.org>

Stephan's Florilegium <http://www.florilegium.org> a vast compilation of articles on many medieval topics, including cooking, brewing, vintning, clothing, and many other aspects of medieval life

Historical Brewing mailing list archive: <http://www.pbm.com/~lindahl/hist-brewing/archive/index> the searchable archive of the historical brewing discussion group

Recreating Medieval English Ales http://www.cs.cmu.edu/~pwp/tofi/medieval_english_ale.html

Cindy Renfrow, author <http://www.thousandeggs.com/>

Society of Brewers: <http://beertown.org>

John Lifer, author, keg merchant <http://www2.misnet.com/~jliferjr/Kegs/whatsnew.htm>

William's Brewing, mail order <http://www.williamsbrewing.com>